

DATE: Tuesday, April 15, 2003 Printable Copy Create Case

Set Name Query side by side			Set Name result set	
DB=USPT; PLUR=YES; OP=ADJ				
<u>L4</u>	L2 and glucomannan	8	<u>L4</u>	
<u>L3</u>	L2 and (immunoferon or inmunoferon or glycophosopeptical)	0	<u>L3</u>	
<u>L2</u>	L1 and asthma\$3	144	<u>L2</u>	
<u>L1</u>	((514/25   514/42   514/54   514/62 )!.CCLS.   (536/18.7   536/123.1   536/123.12   536/124 )!.CCLS. )	4488	<u>L1</u>	

**END OF SEARCH HISTORY** 

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS

RN **87139-86-4** REGISTRY

CN Inmunoferon (9CI) (CA INDEX NAME)

OTHER NAMES:

CN AM 3

CN Glicofosfopeptical

MF Unspecified

CI MAN

LC STN Files: BIOSIS, CA, CANCERLIT, CAPLUS, CIN, DDFU, DRUGU, IPA, MEDLINE, PHARMASEARCH, PROMT, TOXCENTER, USPATFULL, VETU

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

16 REFERENCES IN FILE CA (1962 TO DATE)

16 REFERENCES IN FILE CAPLUS (1962 TO DATE)

## (FILE 'HOME' ENTERED AT 16:32:34 ON 03 MAR 2003)

L1 L2	FILE 'REGISTRY' ENTERED AT 16:32:43 ON 03 MAR 2003 1 S IMMUNOFERON/CN 0 S GLYCOPHOSPHOPEPTICAL/CN
L3 L4	FILE 'CAPLUS, MEDLINE, USPATFULL' ENTERED AT 16:33:59 ON 03 MAR 2003 2 S L1 24 S INMUNOFERON/CN
L5	FILE 'REGISTRY' ENTERED AT 16:35:26 ON 03 MAR 2003 1 S INMUNOFERON/CN
L6 L7 L8	FILE 'USPATFULL, CAPLUS, MEDLINE' ENTERED AT 16:36:12 ON 03 MAR 2003 43 S L1 OR L5 3 S L6 AND (ASTHMA OR ALLEG?) 0 S GLICOFOSFOPEPTICAL/CN
	1 S INMUNOFERON/CN
	FILE 'CAPLUS, MEDLINE, USPATFULL' ENTERED AT 16:43:13 ON 03 MAR 2003

L7 ANSWER 1 OF 3 USPATFULL

ACCESSION NUMBER: 2002:119853 USPATFULL

TITLE: Asthma/allergy therapy that targets

T-lymphocytes and/or eosinophils

INVENTOR(S): Nassief, Nida Abdul-Ghani, Doha, IRAQ

NUMBER DATE

PRIORITY INFORMATION: GB 1999-4777 19990302

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: AL-JASSIM, Rawaa, 2578 River Woods Drive, Naperville,

IL, 60565

NUMBER OF CLAIMS: 24
EXEMPLARY CLAIM: 1
LINE COUNT: 772

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A pharmaceutical composition for the treatment and/or prophylaxis of diseases caused by type I hypersensitivity reactions consisting essentially of Glicophosphopeptical, or pure Nigella Sativa seeds, in a concentration which stimulate Th1 lymphocytes and selectively switch-off the eosinophilic airway inflammation

A method of treatment of allergy using Th1 stimulating agents, to be administered to a mammal such as human in need of such treatment in a shot of 5 days only, resulted in significant decrease in symptom score started day 3, and in sputum eosinophils by day 14, followed by long-term clinical remission of a mean of 6 months.

The BCG-like Th1 stimulation is also used in treating diseases in which the body defensive mechanism is a Cell Mediated Immunity, including viral infections, as but not limited to influenza and common cold, Chronic and recurrent urinary tract infection, pelvic inflammatory diseases as neuroimmune appendicitis, cancer, crohns disease and facial palsy.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:627968 CAPLUS

DOCUMENT NUMBER: 133:202992

TITLE: Glycophosphopeptical or Nigella sativa seeds for

asthma/allergy therapy that targets
T-lymphocytes and/or eosinophils

INVENTOR(S): Nassief, Nida Abdul-Ghani

PATENT ASSIGNEE(S): Al-Jassim, Rawaa, Australia; Al-Kaisi, Ban; James,

David

SOURCE: PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000051580	A2	20000908	WO 2000-IB222	20000302
WO 2000051580	<b>A</b> 3	20011018		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,

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CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
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    EP 1242102
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                            20020925
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PRIORITY APPLN. INFO.:
                                        GB 1999-4777
                                                         A 19990302
                                        GB 1999-13341
                                                            19990608
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                                        WO 2000-IB222
                                                         W 20000302
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    caused by type I hypersensitivity reactions consisting essentially of
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L7 ANSWER 3 OF 3 MEDLINE

ACCESSION NUMBER:

92377675 MEDLINE

DOCUMENT NUMBER:

92377675 PubMed ID: 1509986

TITLE:

[Immunologic clinical evaluation of a biological response modifier, AM3, in the treatment of childhood infectious

respiratory pathology].

Valoracion clinica inmunologica de un modificador de la respuesta biologica, AM3, en el tratamiento de la patologia

respiratoria infecciosa infantil.

AUTHOR:

Sanchez Palacios A; Garcia Marrero J A; Schamann F Servicio de Alergologia, Hospital Insular, Las Palmas. ALLERGOLOGIA ET IMMUNOPATHOLOGIA, (1992 Jan-Feb) 20 (1)

SOURCE:

35-9. Journal code: 0370073. ISSN: 0301-0546.

PUB. COUNTRY:

Spain

DOCUMENT TYPE:

CORPORATE SOURCE:

(CLINICAL TRIAL)

TYPE: (CLINICAL TRIAL)

(CONTROLLED CLINICAL TRIAL)

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

Spanish

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

199209

ENTRY DATE:

Entered STN: 19921009

Last Updated on STN: 19980206 Entered Medline: 19920918

AB To assess the immunoclinical effectiveness of a biological response immunomodulator, we used AM3 (glycophosphopeptide), a glucomannan polysaccharide extracted from the cell wall of a strain of Candida utilis, in 20 children with asthmatic bronchitis. They received 2 envelopes (1 g) daily for 4 months. The results were compared with a control group of 20 untreated children with the same pathology. The following clinical and immunological parameters were assessed in all of them: cough, dyspnea, expectoration, frequency and intensity of the bronchospasm, time of administration of the symptomatic medication, and the delayed cutaneous

cells response by means of the intradermal reaction of 5 antigens (Trichophyton, Candida albicans, tuberculin, E. coli and bacterial antigens). In the treated group, the immunoferon (AM3) reduced the symptoms, the intensity and frequency of the bronchospasm, and the symptomatic medication (table I, II and III). In basal conditions, the 40 children presented a state of 75% anergy; after 4 months of treatment, the treated group experienced a 45% decrease in their anergic situation, variation which was statistically significant when compared with the control group. In our 20 treated patients, AM3 behaved like and immunostimulant, improving the clinical situation and progress in patients with infectious respiratory disorders. We consider that the immunoferon constitutes a coadjuvant therapy to bacterial immunotherapy.





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Entrez PubMed	☐ 1: Gallego Olivella J, Fadurdo Torrus E. Related	d Artic
	Study of the immunostimulating effect of glycophosphopeptical (AM3) FEMS Immunol-Med Microbiol. 1997 May;18(1):87-9. PMID: 9215591 [PubMed - indexed for MEDLINE]	in m
PubMed Services	Marcos Sanchez F, Juarez Ucelay F, Ramos de Diego MP, Duran Perez-Navarro D. Related	d Artic
	[Glycophosphopeptical in the treatment of recurrent oral aphthosis] An Med Interna. 1994 Jan;11(1):44. Spanish. No abstract available. PMID: 8025195 [PubMed - indexed for MEDLINE]	
	3: Sanchez Palacios A, Garcia Marrero JA, Schamann F. Related	d Artic
Related Resources	[Immunologic clinical evaluation of a biological response modifier, AM treatment of childhood infectious respiratory pathology] Allergol Immunopathol (Madr). 1992 Jan-Feb;20(1):35-9. Spanish. PMID: 1509986 [PubMed - indexed for MEDLINE]	13, in
	<b>14:</b> Gillissen G, Breuer-Werle M, Schmitz AE. Related	d Artic
	[Effects of Immunoferon on humoral immune response] Rev Clin Esp. 1984 Jan 15;172(1):21-2. Spanish. No abstract available. PMID: 6709942 [PubMed - indexed for MEDLINE]	<i>a                                    </i>
·	5: Rodriguez F, Brieva A, Tuduri P, Velasco R, Martinez A, Rodriguez-Novas Related G, Guerrero A, Pivel JP, Sada G.	d Artic
	[Effect of a new drug on the immune system and its relation to induced the mouse] Rev Clin Esp. 1983 May 15;169(3):191-3. Spanish. No abstract available.	infec
	PMID: 6351183 [PubMed - indexed for MEDLINE]	
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2019



#### 9 page(s) will be printed.



## Back

Record: 1

Title:

Identification and characterization of the peptidic component of the immunomodulatory

glycoconjugate Immunoferon.

Author(s):

Varela J; Navarro Pico ML; Guerrero A; García F; Giménez Gallego G; Pivel JP

Author's Address: Centro de Investigaciones Biológicas (CIB), Industrial Farmaceútica Cantabria S.A., Madrid, Spain.

Methods and findings in experimental and clinical pharmacology [Methods Find Exp Clin Pharmacol] 2002 Oct; 24 (8), pp. 471-80.

Pub. Type:

Source:

Journal Article

Language:

English

Journal Info:

Country of Publication: Spain NLM ID: 7909595 ISSN: 0379-0355 Subsets: PreMEDLINE-In

Abstract:

Inmunoferon is a glycoconjugate of natural origin, formed by the noncovalent association of a protein from Ricinus communis and a polysacharidic moiety, and endowed with immunomodulatory as well as pharmacological activities. This study investigated the nature of polypeptidic component of Inmunoferon. Through biochemical procedures and comparison with protein databases, the isolated protein was identified as the processed form of the seed of Ricinus communis 2S storage polypeptide, which has been termed RicC3. Further analysis of the isolated protein has revealed that it is composed of two different subunits, alpha and beta, which form an heterodimer of high stability and resistance to denaturation, acidic pH and proteolytic cleavage. These findings confirm the excellent properties of the product after oral administration and provide additional support for

the pharmacological activities of Inmunoferon.

Entry Date(s):

Date Created: 20021225

Citation ID(s):

PMID: 12500425 Medline UI: 22388841

Database:



Title:

AM3 (Inmunoferón) as an adjuvant to hepatitis B vaccination in hemodialysis patients.

Author(s):

Pérez-García R; Pérez-García A; Verbeelen D; Bernstein ED; Villarrubia VG; Alvarez-Mon M

Author's Address: Nephrology Service, Gregorio Marañón Hospital, Madrid, Spain.

Source:

Kidney international [Kidney Int] 2002 May; 61 (5), pp. 1845-52.

Pub. Type:

Clinical Trial; Journal Article; Multicenter Study; Randomized Controlled Trial

Language:

**English** 

Journal Info:

Country of Publication: United States NLM ID: 0323470 ISSN: 0085-2538 Subsets: IM

MeSH Terms:

Renal Dialysis\*

Adjuvants, Immunologic/\*administration & dosage Calcium Phosphates/\*administration & dosage Glycopeptides/\*administration & dosage Hepatitis B Vaccines/\*administration & dosage Hepatitis-B, Chronic/\*prevention-&-control

Aged; Double-Blind Method; Female; Follow-Up Studies; Hepatitis B Antibodies/blood; Hepatitis B,

Chronic/immunology; Human; Kidney Failure, Chronic/immunology; Kidney Failure,

Chronic/therapy; Kidney Failure, Chronic/virology; Male; Middle Age

Abstract:

BACKGROUND: Patients with end-stage renal disease (ESRD) undergoing hemodialysis have severe alterations in cell-mediated immunity (CMI) that increases their risk of contracting chronic hepatitis B virus (HBV) infection and decreases their protective responses to HBV vaccine. In an effort to improve the humoral response to an accelerated HBV vaccine protocol in these patients, the ability of an immunomodulator, AM3, to improve seroconversion was investigated. METHODS: A total of 269 patients were enrolled in a multicenter trial. All patients received a DNA recombinant vaccine (40 microg HBsAg/dose/day) on days 0, 10, 21, and 90. AM3 or placebo (3 g/day) was given orally for 30 consecutive days beginning 15 days prior to the first vaccine dose. Anti-HBsAg titers were measured on days 120 and 270 after the beginning of the trial. RESULTS: After one month, 207 patients could be evaluated and 132 patients after six months. The placebo and AM3-treated groups had comparable seroconversion and protective response rates one month after the final vaccine dose. The AM3 treatment group, but not the placebo group, maintained these protective titers up to six months after the final vaccine dose. At this time, the percentage of high responders (anti-HBsAg>100 IU/L) and mean anti-HBsAg titers in the AM3 group was significantly higher than in the placebo group. CONCLUSIONS: AM3 is a safe and easily tolerated oral agent that potentiates long-term serological immunity to hepatitis B in hemodialysis patients after vaccination.

CAS Registry No.: 0 (Adjuvants, Immunologic)

0 (Calcium Phosphates)

0 (Glycopeptides)

0 (Hepatitis B Antibodies) 0 (Hepatitis B Vaccines) 87139-86-4 (Immunoferon)

Entry Date(s):

Date Created: 20020422 Date Completed: 20021028

Citation ID(s):

PMID: 11967036 Medline UI: 21964541

Database:



Title:

Immunoferon, a glycoconjugate of natural origin, inhibits LPS-induced TNF-alpha production and

inflammatory responses.

Author(s):

Brieva A; Guerrero A; Alonso-Lebrero JL; Pivel JP

Author's Address: R&D Department, Industrial Frarmaceútica Cantabria SA, Madrid, Spain.

Source:

International immunopharmacology [Int Immunopharmacol] 2001 Oct; 1 (11), pp. 1979-87.

Pub. Type:

Journal Article

Language:

English

Journal Info:

Country of Publication: Netherlands NLM ID: 100965259 ISSN: 1567-5769 Subsets: IM

MeSH Terms:

Adjuvants, Immunologic/\*pharmacology

Anti-Inflammatory Agents, Non-Steroidal/\*pharmacology

Calcium Phosphates/\*pharmacology

Glycopeptides/\*pharmacology

Lipopolysaccharides/\*antagonists-& inhibitors

Tumor Necrosis Factor/\*biosynthesis

Animal; Chromatography, Gas; Corticosterone/blood; Enzyme-Linked Immunosorbent Assay; Indicators and Reagents; Inflammation/pathology; Inflammation/prevention &

control; Interleukin-6/biosynthesis; Leukocyte

Count; Lipopolysaccharides/metabolism; Lipopolysaccharides/pharmacology; Macrophages, Peritoneal/drug effects; Macrophages, Peritoneal/metabolism; Male; Mice; Mice, Inbred BALB

C; Rats; Rats, Inbred Lew

Abstract:

We have analyzed the effect of a patented glycoconjugate (GC) of natural origin, Inmunoferon, in the development of the response to endotoxemia induced by administration of LPS in rodents. We have observed that oral treatment with the drug reduced the levels of serum TNF-alpha induced by an intravenous pulse of LPS. The serum of pretreated mice blocked TNF-alpha production by peritoneal macrophages. The drug increased the levels of TNF-alpha regulators such as IL-10 and

corticosteroids, whereas it inhibited TNF-alpha-dependent IL-6 production. Further

TNF-alpha-dependent responses, such as cell extravasation, was decreased in treated mice. According to these results, Inmunoferon is postulated as an inhibitor of the systemic response to LPS. Correlation of the observations made in mice with a rat model suggests the efficacy of this product in reducing TNF-alpha production in a species-independent fashion and opens the possibility of its trial as an adjuvant of antibiotics in treatment against gram-negative bacterial

infection.

CAS Registry No.: 0 (Adjuvants, Immunologic)

0 (Anti-Inflammatory Agents, Non-Steroidal)

0 (Calcium Phosphates) 0 (Glycopeptides)

0 (Indicators and Reagents)

0 (Interleukin-6)

0 (Lipopolysaccharides) 0 (Tumor Necrosis Factor) 50-22-6 (Corticosterone) 87139-86-4 (Immunoferon)

Entry Date(s):

Date Created: 20011018 Date Completed: 20020322

Citation ID(s):

PMID: 11606029 Medline UI: 21517699

Database:

Title:

Immunorestorative effect of thymostimulin on surgery immunodepression: experimental model.

Author(s):

García-Lechuz JM; Navarro M; Morandeira MJ; Soria J; Román A; Güemes A; Salinas JC; Lozano

Author's Address: Department of Surgery, University of Zaragoza, Spain.

Source:

European surgical research. Europaische chirurgische Forschung. Recherches chirurgicales

europeennes [Eur Surg Res] 1993 Mar-Apr; 25 (2), pp. 74-82.

Pub. Type:

Journal Article

Language:

**English** 

Journal Info:

Country of Publication: SWITZERLAND NLM ID: 0174752 ISSN: 0014-312X Subsets: IM; X

MeSH Terms:

Surgical Procedures, Operative\*

Adjuvants, Immunologic/\*pharmacology

Immune Tolerance/\*drug effects Thymus Extracts/\*pharmacology

Animal; CD4-CD8 Ratio; Calcium Phosphates/pharmacology; Glycopeptides/pharmacology; Graft

Rejection; Lymphocyte Subsets/immunology; Rats; Rats, Inbred WF; Skin

Transplantation; Spleen/immunology; Support, Non-U.S. Gov't

Abstract:

The purpose of the present study is to ascertain the immunorestorative effect of two different drugs on immunodepression induced by small bowel surgical resection in an experimental model. The potential immunorestorative effect has been measured by the ability of the drug to avoid the delay of skin allograft rejection induced by surgery and the inhibition of CD4/CD8 index changes induced by surgery in spleen tissue. 120 Wistar-Furth rats (age 12-16 weeks) anesthetized with a single intramuscular dose of ketamine (25 mg), diazepine (4 mg) and atropine (0.1 mg) were allotted to two main groups. One group received a skin graft (SG) from Fisher 344 rats and was treated with placebo, Inmunoferón (AM-3 polypeptidic drug) or TP-1 (thymostimulin) before the experiment (groups I, II, III) or treated with placebo, Inmunoferon or TP-1 before the experiment and underwent enterectomy and anastomosis (groups IV, V, VI). On the 2nd, 5th and 8th postoperative days, biopsies of the SG were taken and the signs of rejection were microscopically studied and evaluated by a pathologist as zero, incipient, moderate or massive. The other group was treated similarly, but the animals did not receive a SG and were splenectomized 5 days later. CD4 and CD8 lymphocyte subpopulations were identified by means of immunoperoxidase technique and monoclonal antibodies. Thymostimulin is able to stimulate the presence of SG rejection signs on the 2nd postoperative day in nonenterectomized animals and on the 8th postoperative day in nonenterectomized animals and on the 8th postoperative day in enterectomized rats and is able to avoid the decrease of the CD4/CD8 index in spleen tissue after surgical

immunodepression.(ABSTRACT TRUNCATED AT 250 WORDS)

CAS Registry No.: 0 (Adjuvants, Immunologic)

0 (Calcium Phosphates)

0 (Glycopeptides)

0 (Thymus Extracts) 0 (thymostimulin)

87139-86-4 (Immunoferon)

**Revision Date:** 

20011113

Entry Date(s):

Date Created: 19930602 Date Completed: 19930602

Citation ID(s):

PMID: 8482312 Medline UI: 93245837

Database:



Back

Record: 1

Title:

Identification and characterization of the peptidic component of the immunomodulatory

glycoconjugate Immunoferon.

Author(s):

Varela J; Navarro Pico ML; Guerrero A; García F; Giménez Gallego G; Pivel JP

Author's Address: Centro de Investigaciones Biológicas (CIB), Industrial Farmaceútica Cantabria S.A., Madrid, Spain.

Methods and findings in experimental and clinical pharmacology [Methods Find Exp Clin Pharmacol] 2002 Oct; 24 (8), pp. 471-80.

Source: Pub. Type:

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Language:

English

Journal Info:

Country of Publication: Spain NLM ID: 7909595 ISSN: 0379-0355 Subsets: PreMEDLINE-In

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Kidney international [Kidney Int] 2002 May; 61 (5), pp. 1845-52.

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Aged; Double-Blind Method; Female; Follow-Up Studies; Hepatitis B Antibodies/blood; Hepatitis B,

Chronic/immunology; Human; Kidney Failure, Chronic/immunology; Kidney Failure,

Chronic/therapy: Kidney Failure, Chronic/virology: Male: Middle Age

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Calcium Phosphates/\*pharmacology

Glycopeptides/\*pharmacology

Lipopolysaccharides/\*antagonists & inhibitors

Tumor Necrosis Factor/\*biosynthesis

Animal; Chromatography, Gas; Corticosterone/blood; Enzyme-Linked Immunosorbent -Assay:-Indicators-and-Reagents: Inflammation/pathology; Inflammation/prevention &

control; Interleukin-6/biosynthesis; Leukocyte

Count; Lipopolysaccharides/metabolism; Lipopolysaccharides/pharmacology; Macrophages, Peritoneal/drug effects; Macrophages, Peritoneal/metabolism; Male; Mice; Mice, Inbred BALB

C: Rats: Rats. Inbred Lew

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0 (Anti-Inflammatory Agents, Non-Steroidal)

0 (Calcium Phosphates) 0 (Glycopeptides)

0 (Indicators and Reagents)

0 (Interleukin-6)

0 (Lipopolysaccharides) 0 (Tumor Necrosis Factor) 50-22-6 (Corticosterone) 87139-86-4 (Immunoferon)

Entry Date(s):

Date Created: 20011018 Date Completed: 20020322

Citation ID(s):

PMID: 11606029 Medline UI: 21517699

Database:

Title:

Immunorestorative effect of thymostimulin on surgery immunodepression: experimental model.

Author(s):

García-Lechuz JM; Navarro M; Morandeira MJ; Soria J; Román A; Güemes A; Salinas JC; Lozano

Author's Address: Department of Surgery, University of Zaragoza, Spain.

Source:

European surgical research. Europaische chirurgische Forschung. Recherches chirurgicales

europeennes [Eur Surg Res] 1993 Mar-Apr; 25 (2), pp. 74-82.

Pub. Type:

Language:

**English** 

Journal Info:

Country of Publication: SWITZERLAND NLM ID: 0174752 ISSN: 0014-312X Subsets: IM; X

MeSH Terms:

Surgical Procedures, Operative\*

Adjuvants, Immunologic/\*pharmacology Immune Tolerance/\*drug effects Thymus Extracts/\*pharmacology

Animal; CD4-CD8 Ratio; Calcium Phosphates/pharmacology; Glycopeptides/pharmacology; Graft

Rejection: Lymphocyte Subsets/immunology: Rats: Rats, Inbred WF: Skin

Transplantation; Spleen/immunology; Support, Non-U.S. Gov't\_

Abstract:

The purpose of the present study is to ascertain the immunorestorative effect of two different drugs on immunodepression induced by small bowel surgical resection in an experimental model. The potential immunorestorative effect has been measured by the ability of the drug to avoid the delay of skin allograft rejection induced by surgery and the inhibition of CD4/CD8 index changes induced by surgery in spleen tissue. 120 Wistar-Furth rats (age 12-16 weeks) anesthetized with a single intramuscular dose of ketamine (25 mg), diazepine (4 mg) and atropine (0.1 mg) were allotted to two main groups. One group received a skin graft (SG) from Fisher 344 rats and was treated with placebo, Inmunoferón (AM-3 polypeptidic drug) or TP-1 (thymostimulin) before the experiment (groups I, II, III) or treated with placebo, Inmunoferón or TP-1 before the experiment and underwent enterectomy and anastomosis (groups IV, V, VI). On the 2nd, 5th and 8th postoperative days, biopsies of the SG were taken and the signs of rejection were microscopically studied and evaluated by a pathologist as zero, incipient, moderate or massive. The other group was treated similarly, but the animals did not receive a SG and were splenectomized 5 days later. CD4 and CD8 lymphocyte subpopulations were identified by means of immunoperoxidase technique and monoclonal antibodies. Thymostimulin is able to stimulate the presence of SG rejection signs on the 2nd postoperative day in nonenterectomized animals and on the 8th postoperative day in nonenterectomized animals and on the 8th postoperative day in enterectomized rats and is able to avoid the decrease of the CD4/CD8 index in spleen tissue after surgical

immunodepression.(ABSTRACT TRUNCATED AT 250 WORDS)

CAS Registry No.: 0 (Adjuvants, Immunologic)

0 (Calcium Phosphates) 0 (Glycopeptides)

0 (Thymus Extracts) 0 (thymostimulin)

87139-86-4 (Immunoferon)

**Revision Date:** 

20011113

Entry Date(s):

Date Created: 19930602 Date Completed: 19930602

Citation ID(s):

PMID: 8482312 Medline UI: 93245837

Database:

Title:

[The clinical evaluation of glycophosphopeptical (Immunoferon) as combined treatment in patients

with chronic lung disease]

Transliterated Title: Valoración clínica de glicofosfopeptical (Inmunoferon) como tratamiento asociado en pacientes

afectos de enfermedad pulmonar crónica.

Author(s):

Marcos Sánchez F; Rodríguez Gallego C; Celdrán Gil J; Durán Pérez-Navarro A

Source:

Anales de medicina interna : organo oficial de la Sociedad Espanola de Medicina Interna [An Med

Interna] 1989 Dec; 6 (12), pp. 657-8.

Pub. Type:

Letter

Language:

Spanish

Journal Info:

Country of Publication: SPAIN NLM ID: 9112183 ISSN: 0212-7199 Subsets: IM

MeSH Terms:

Calcium Phosphates/\*therapeutic use

Glycopeptides/\*therapeutic use

Lung-Diseases, Obstructive/\*drug therapy

Aged; Drug Evaluation; Drug Therapy, Combination; Female; Human; Male; Middle Age

CAS Registry No.:

0 (Calcium Phosphates)

0 (Glycopeptides)

87139-86-4 (Immunoferon)

Revision Date:

20001218

Entry Date(s):

Date Created: 19911016 Date Completed: 19911016

Citation ID(s):

PMID: 2491481 Medline UI: 91363626

Database:

**MEDLINE** 

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ANSWER 1 OF 7 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:223217 CAPLUS

DOCUMENT NUMBER:

136:334953

TITLE:

Compilation and meta-analysis of randomized

placebo-controlled clinical trials on the prevention

of respiratory tract infections in children

using immunostimulants

AUTHOR(S):

Berber, Arturo; Del-Rio-Navarro, Blanca

CORPORATE SOURCE:

Allergy and Immunology Service, Hospital Infantil de

Mexico "Federico Gomez,", Mexico City, Mex.

SOURCE:

Journal of Investigational Allergology and Clinical

Immunology (2001), 11(4), 235-246

CODEN: JIAIEF; ISSN: 1018-9068

Hogrefe & Huber Publishers

DOCUMENT TYPE:

Journal

PUBLISHER: LANGUAGE:

English

Several immunostimulants presume to prevent respiratory tract infections (RTIs) in children, but their efficacy is controversial. Aim was to compile the findings of the randomized, placebo-controlled trials (RCTs) on the prevention of acute respiratory tract infections (ARTIs) in children using immunostimulants, and to perform a meta-anal. Medline, EMBASE databases, and register of Cochrane Acute Respiratory Infection Group. We searched all the refs. of immunostimulants and selected papers referring to RCTs on the prevention of ARTIs in children. Papers were rated according to Jadad's instrument. We abstracted the no. of ARTIs, and a one-tailed probability value (p) was abstracted for each trial. Effect of medication was detd. as weighted mean .+-. SE of percent redn. of ARTIs regarding ARTIs of placebo groups as 100%. Four of five RCTs with Jadad's score > 3 showed significant redn. of ARTIs in immunostimulant groups. When only the trials reporting mean .+-. SD and/or dispersion were considered (n = 16), the global weighted percent effect of immunostimulants showed a change of -42.64%, with 95% confidence intervals from -45.19% to -40.08%; i.e., the treated group presented about 60% of the mean no. of ARTIs in the placebo group. According to this meta-anal. and RCTs with Jadad's score > 3, immunostimulants are an effective treatment for the prevention of ARTI. Further high-quality RCTs are required to demonstrate the effect and the size of the effect of each individual immunostimulant.

REFERENCE COUNT: THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS 68

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

- Compilation and meta-analysis of randomized placebo-controlled clinical trials on the prevention of respiratory tract infections in children using immunostimulants
- AΒ Several immunostimulants presume to prevent respiratory tract infections (RTIs) in children, but their efficacy is controversial. Aim was to compile the findings of the randomized, placebo-controlled trials (RCTs) on the prevention of acute respiratory tract infections (ARTIS) in children using immunostimulants, and to perform a meta-anal. Medline, EMBASE databases, and register of Cochrane Acute Respiratory Infection Group. We searched all the refs. of immunostimulants and selected papers referring to RCTs on the prevention of ARTIs in children. Papers were rated according to Jadad's instrument. We abstracted the no. of ARTIs, and a one-tailed probability value (p) was abstracted for each trial. Effect of medication was detd. as weighted mean .+-. SE of percent redn. of ARTIs regarding ARTIs of placebo groups as 100%. Four of five RCTs with Jadad's score > 3 showed significant redn. of ARTIs in immunostimulant groups. When only the trials reporting mean .+-. SD and/or dispersion were considered (n = 16), the global weighted percent effect of immunostimulants showed a change of -42.64%, with 95% confidence intervals from -45.19% to -40.08%; i.e., the treated group presented about 60% of the mean no. of ARTIs in the placebo group. According to this meta-anal. and RCTs with Jadad's score > 3, immunostimulants are an effective treatment for the prevention of ARTI. Further high-quality RCTs are required to demonstrate the effect and the

```
size of the effect of each individual immunostimulant.
     immunostimulant respiratory tract infection child meta analysis
ST
IT
     Pelargonium sidoides
        (Umckaloabo; immunostimulants in prevention of respiratory
        tract infections in children (meta-anal.))
     Development, mammalian postnatal
IT
        (child; immunostimulants in prevention of respiratory tract
        infections in children (meta-anal.))
ΙT
     Human
     Immunostimulants
     Ribosome
        (immunostimulants in prevention of respiratory tract
        infections in children (meta-anal.))
IΤ
     Thymus hormones
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (immunostimulants in prevention of respiratory tract
        infections in children (meta-anal.))
    Respiratory tract
ŢΨ
        (infection; immunostimulants in prevention of respiratory
        tract infections in children (meta-anal.))
IT
    Information systems
        (searching; immunostimulants in prevention of respiratory
        tract infections in children (meta-anal.))
     87139-86-4, Inmunoferon 88402-38-4, Broncho-Vaxom
IT
                                                          121808-62-6,
             123243-05-0, Paspat 146418-27-1, Biostim 153191-77-6, Luivac
     419574-57-5, Immunobalt 419574-58-6, Munostin 419574-59-7, Pulmonar OM
                          419574-61-1, Immucytal
     419574-60-0, Ribovac
    RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (immunostimulants in prevention of respiratory tract
       infections in children (meta-anal.))
    ANSWER 2 OF 7 CAPLUS COPYRIGHT 2003 ACS
                     2000:627968 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                        133:202992
TITLE:
                        Glycophosphopeptical or Nigella sativa seeds for
                        asthma/allergy therapy that targets
                        T-lymphocytes and/or eosinophils
INVENTOR(S):
                        Nassief, Nida Abdul-Ghani
                        Al-Jassim, Rawaa, Australia; Al-Kaisi, Ban; James,
PATENT ASSIGNEE(S):
                        David
                        PCT Int. Appl., 28 pp.
SOURCE:
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                          APPLICATION NO. DATE
    PATENT NO.
                 KIND DATE
                     ____
                           -----
                                          -----
                    A2
A3
                           20000908
                                          WO 2000-IB222
    WO 2000051580
                                                           20000302
    WO 2000051580
                           20011018
        W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
            CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
            IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
            MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
            SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
            AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
            DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
            CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                           20000927 GB 2000-5003
20020925 EP 2000-909548
    GB 2348132
                      A1
                                                           20000301
    EP 1242102
                                                           20000302
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Α2

AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY US 2002061841 A1 20020523 US 2001-944564 20010904 PRIORITY APPLN. INFO.: GB 1999-4777 A 19990302 GB 1999-13341 19990608 Α WO 2000-IB222 W 20000302 AB A pharmaceutical compn. for the treatment and/or prophylaxis of diseases caused by type I hypersensitivity reactions consisting essentially of glycophosphopeptical, or pure Nigella Sativa seeds, in a concn. which stimulate Th1 lymphocytes and selectively switch-off the eosinophilic airway inflammation. A method of treatment of allergy using Th1 stimulating agents, to be administered to a mammal such as human in need of such treatment in a shot of 5 days only, resulted in significant decrease in symptom score started day 3, and in sputum eosinophils by day 14, followed by long-term clin. remission of a mean of 6 mo. The BCG-like Th1 stimulation is also used in treating diseases in which the body defensive mechanism is a cell-mediated immunity, including viral infections, including influenza and common cold, chronic and recurrent urinary tract infection, pelvic inflammatory diseases as neuroimmune appendicitis, cancer, Crohn's disease and facial palsy. Glycophosphopeptical or Nigella sativa seeds for asthma/ TIallergy therapy that targets—T-lymphocytes and/or eosinophils A pharmaceutical compn. for the treatment and/or prophylaxis of diseases AΒ caused by type I hypersensitivity reactions consisting essentially of glycophosphopeptical, or pure Nigella Sativa seeds, in a concn. which stimulate Th1 lymphocytes and selectively switch-off the eosinophilic airway inflammation. A method of treatment of allergy using Th1 stimulating agents, to be administered to a mammal such as human in need of such treatment in a shot of 5 days only, resulted in significant decrease in symptom score started day 3, and in sputum eosinophils by day 14, followed by long-term clin. remission of a mean of 6 mo. The BCG-like Th1 stimulation is also used in treating diseases in which the body defensive mechanism is a cell-mediated immunity, including viral infections, including influenza and common cold, chronic and recurrent urinary tract infection, pelvic inflammatory diseases as neuroimmune appendicitis, cancer, Crohn's disease and facial palsy. qlycophosphopeptical immunostimulant cell mediated immunity; STallergy T cell eosinophil glycophosphopeptical immunostimulant; asthma T cell eosinophil glycophosphopeptical immunostimulant TΤ Intestine, disease (Crohn's; glycophosphopeptical or Nigella sativa seeds for asthma/allergy therapy targeting t-lymphocytes and/or eosinophils) IT Immunoglobulins RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (E, type 1 IgE-mediated hypersensitivity; glycophosphopeptical or Nigella sativa seeds for asthma/allergy therapy targeting t-lymphocytes and/or eosinophils) IT Lymphocyte (activation; glycophosphopeptical or Nigella sativa seeds for asthma/allergy therapy targeting t-lymphocytes and/or eosinophils) TT Reproductive tract (adnexitis; glycophosphopeptical or Nigella sativa seeds for asthma/allergy therapy targeting t-lymphocytes and/or eosinophils) IT Eye, disease (allergic conjunctivitis; glycophosphopeptical or Nigella sativa seeds for asthma/allergy therapy targeting t-lymphocytes and/or eosinophils)

(allergic rhinitis; glycophosphopeptical or Nigella sativa seeds for

asthma/allergy therapy targeting t-lymphocytes and/or

IT

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eosinophils)
ΙT
     Dermatitis
        (atopic; glycophosphopeptical or Nigella sativa seeds for
        asthma/allergy therapy targeting t-lymphocytes and/or
        eosinophils)
ΙT
     Drug delivery systems
        (capsules; glycophosphopeptical or Nigella sativa seeds for
        asthma/allergy therapy targeting t-lymphocytes and/or
        eosinophils)
TΤ
     Immunity
        (cell-mediated; glycophosphopeptical or Nigella sativa seeds for
        asthma/allergy therapy targeting t-lymphocytes and/or
        eosinophils)
ΙT
     Urticaria
        (chronic; glycophosphopeptical or Nigella sativa seeds for
        asthma/allergy therapy targeting t-lymphocytes and/or
        eosinophils)
IT
     Allergy
       Asthma
        (diagnosis; glycophosphopeptical or Nigella sativa seeds for
        asthma/allergy therapy targeting t-lymphocytes and/or
        eosinophils)
IΤ
     Larynx
        (edema; glycophosphopeptical or Nigella sativa seeds for asthma
        /allergy therapy targeting t-lymphocytes and/or eosinophils)
ΙT
     Cytokines
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
        (eosinophil chemotactic factor; glycophosphopeptical or Nigella sativa
        seeds for asthma/allergy therapy targeting
        t-lymphocytes and/or eosinophils)
ΤТ
     Paralysis
        (facial palsy; glycophosphopeptical or Nigella sativa seeds for
        asthma/allergy therapy targeting t-lymphocytes and/or
        eosinophils)
TΤ
     Drugs
        (gastrointestinal; glycophosphopeptical or Nigella sativa seeds for
        asthma/allergy therapy targeting t-lymphocytes and/or
        eosinophils)
ΙT
     Allergy inhibitors
    Anti-inflammatory agents
     Antiasthmatics
     Antitumor agents
     Antiviral agents
     Common cold
     Drug delivery systems
     Eosinophil
     Immunostimulants
     Influenza
    Mycobacterium BCG
        (glycophosphopeptical or Nigella sativa seeds for asthma/
        allergy therapy targeting t-lymphocytes and/or eosinophils)
TΤ
     Interferons
     RL: BAC (Biological activity or effector, except adverse); BOC (Biological
     occurrence); BSU (Biological study, unclassified); BIOL (Biological
     study); OCCU (Occurrence)
        (glycophosphopeptical or Nigella sativa seeds for asthma/
        allergy therapy targeting t-lymphocytes and/or eosinophils)
TT
    T cell (lymphocyte)
        (helper cell/inducer, TH1; glycophosphopeptical or Nigella sativa seeds
        for asthma/allergy therapy targeting t-lymphocytes
        and/or eosinophils)
ΙT
    Allergy
        (immediate hypersensitivity; glycophosphopeptical or Nigella sativa
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seeds for asthma/allergy therapy targeting
        t-lymphocytes and/or eosinophils)
ΙT
     Respiratory tract
     Urinary tract
        (infection; glycophosphopeptical or Nigella sativa seeds for
        asthma/allergy therapy targeting t-lymphocytes and/or
        eosinophils)
ΙT
     Respiratory tract
        (inflammation; glycophosphopeptical or Nigella sativa seeds for
        asthma/allergy therapy targeting t-lymphocytes and/or
        eosinophils)
     Drug delivery systems
IT
        (lozenges; glycophosphopeptical or Nigella sativa seeds for
        asthma/allergy therapy targeting t-lymphocytes and/or
        eosinophils)
TT
     Cell activation
     Cell proliferation
        (lymphocyte; glycophosphopeptical or Nigella sativa seeds for
        asthma/allergy therapy targeting t-lymphocytes and/or
        eosinophils)
IT
     Appendix
        (neuroimmune appendicitis; glycophosphopeptical or Nigella sativa seeds
        for asthma/allergy therapy targeting t-lymphocytes
        and/or eosinophils)
IT
     Drug delivery systems
        (ointments, creams; glycophosphopeptical or Nigella sativa seeds for
        asthma/allergy therapy targeting t-lymphocytes and/or
        eosinophils)
ΙT
     Drug delivery systems
        (ointments; glycophosphopeptical or Nigella sativa seeds for
        asthma/allergy therapy targeting t-lymphocytes and/or
        eosinophils)
TT
     Drug delivery systems
        (powders; glycophosphopeptical or Nigella sativa seeds for
        asthma/allergy therapy targeting t-lymphocytes and/or
        eosinophils)
ΙT
     Lymphocyte
        (proliferation; glycophosphopeptical or Nigella sativa seeds for
        asthma/allergy therapy targeting t-lymphocytes and/or
        eosinophils)
IT
     Tuberculin
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (purified protein deriv.; glycophosphopeptical or Nigella sativa seeds
        for asthma/allergy therapy targeting t-lymphocytes
        and/or eosinophils)
IT
        (rhinitis, perennial; glycophosphopeptical or Nigella sativa seeds for
        asthma/allergy therapy targeting t-lymphocytes and/or
        eosinophils)
ΙT
     Nigella sativa
        (seeds; glycophosphopeptical or Nigella sativa seeds for asthma
        /allergy therapy targeting t-lymphocytes and/or eosinophils)
ΙT
     Drug delivery systems
        (solns., nasal; glycophosphopeptical or Nigella sativa seeds for
        asthma/allergy therapy targeting t-lymphocytes and/or
        eosinophils)
IT
     Drug delivery systems
        (solns., ophthalmic; glycophosphopeptical or Nigella sativa seeds for
        asthma/allergy therapy targeting t-lymphocytes and/or
        eosinophils)
TT
     Drug delivery systems
        (suspensions; glycophosphopeptical or Nigella sativa seeds for
        asthma/allergy therapy targeting t-lymphocytes and/or
```

eosinophils)

IT Drug delivery systems

(syrups; glycophosphopeptical or Nigella sativa seeds for asthma/allergy therapy targeting t-lymphocytes and/or eosinophils)

IT Drug delivery systems

(tablets; glycophosphopeptical or Nigella sativa seeds for asthma/allergy therapy targeting t-lymphocytes and/or eosinophils)

IT Drug delivery systems

(topical; glycophosphopeptical or Nigella sativa seeds for asthma/allergy therapy targeting t-lymphocytes and/or eosinophils)

IT Drug delivery systems

(vaginal; glycophosphopeptical or Nigella sativa seeds for asthma/allergy therapy targeting t-lymphocytes and/or eosinophils)

IT **87139-86-4**, Inmunoferon

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(glycophosphopeptical or Nigella sativa seeds for asthma/ allergy therapy targeting t-lymphocytes and/or eosinophils)

L3 ANSWER 3 OF 7 MEDLINE

ACCESSION NUMBER: 2001404094 MEDLINE

DOCUMENT NUMBER: 21294697 PubMed ID: 11401877

TITLE: Defective natural killer and phagocytic activities in

chronic obstructive pulmonary disease are restored by

glycophosphopeptical (inmunoferon).

AUTHOR: Prieto A; Reyes E; Bernstein E D; Martinez B; Monserrat J;

Izquierdo J L; Callol L; de LUCAS P; Alvarez-Sala R;

Alvarez-Sala J L; Villarrubia V G; Alvarez-Mon M

CORPORATE SOURCE: Department of Medicine CSIC Associated Unit, University of

Alcala, Alcala de Henares, Madrid, Spain.

SOURCE: AMERICAN JOURNAL OF RESPIRATORY AND CRITICAL CARE MEDICINE,

(2001 Jun) 163 (7) 1578-83.

Journal code: 9421642. ISSN: 1073-449X.

PUB. COUNTRY: United States

DOCUMENT TYPE: (CLINICAL TRIAL)

Journal; Article; (JOURNAL ARTICLE)

(RANDOMIZED CONTROLLED TRIAL)

LANGUAGE: English

FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals

ENTRY MONTH: 200108

ENTRY DATE: Entered STN: 20010806

Last Updated on STN: 20010806 Entered Medline: 20010802

We have investigated both modifications in natural (innate) immunity AB caused by chronic obstructive pulmonary disease (COPD) and the effects of a glycophosphopeptical immunomodulator (Inmunoferon) treatment on COPD-associated immunoalterations. In a double-blinded clinical trial, 60 patients with COPD received glycophosphopeptical or placebo during 90 consecutive days at oral doses of 3 g/d. Fifty-six sex- and age-matched healthy control subjects were included as a reference group for immunologic parameters. Peripheral blood natural killer (PBNK) cell cytotoxic activity and phagocytic activity of peripheral monocytes/macrophages (Mo/Ma) and polymorphonuclear (PMN) cells were assessed at baseline and then again at the end of treatments. We found both PBNK activity and phagocytic activity to be significantly decreased in patients with COPD compared with levels in healthy volunteers. The treatment with glycophosphopeptical provoked significant stimulatory effects on PBNK cytotoxic activity. This stimulation was not mediated by an increase in CD3(-)CD56(+) NK cells. Further, glycophosphopeptical significantly increased the percentage of monocytes and PMNs that

phagocytize Escherichia coli in vitro, as well as increased phagocytic indices. We conclude that peripheral blood cells of patients with COPD show clear defects in natural immunity that are partially rescued by glycophosphopeptical.

CT

Phosphates: TU, therapeutic use

Cytotoxicity, Immunologic: DE, drug effects

Double-Blind Method

\*Glycopeptides: TU, therapeutic use \*Killer Cells, Natural: IM, immunology

\*Lung Diseases, Obstructive: IM, immunology

Macrophages: IM, immunology

Middle Age

Neutrophils: IM, immunology \*Phagocytosis: DE, drug effects

RN 87139-86-4 (Immunoferon)

L3 ANSWER 4 OF 7 MEDLINE

92377675 ACCESSION NUMBER: MEDLINE

92377675 DOCUMENT NUMBER: PubMed ID: 1509986

TITLE: [Immunologic clinical evaluation of a biological response

modifier, AM3, in the treatment of childhood infectious

respiratory pathology].

Valoracion clinica inmunologica de un modificador de la respuesta biologica, AM3, en el tratamiento de la patologia

respiratoria infecciosa infantil.

AUTHOR: Sanchez Palacios A; Garcia Marrero J A; Schamann F

CORPORATE SOURCE: Servicio de Alergologia, Hospital Insular, Las Palmas. SOURCE:

ALLERGOLOGIA ET IMMUNOPATHOLOGIA, (1992 Jan-Feb) 20 (1)

Journal code: 0370073. ISSN: 0301-0546.

PUB. COUNTRY: Spain

(CLINICAL TRIAL)

DOCUMENT TYPE:

(CONTROLLED CLINICAL TRIAL)

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: Spanish

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199209

ENTRY DATE: Entered STN: 19921009

> Last Updated on STN: 19980206 Entered Medline: 19920918

AΒ To assess the immunoclinical effectiveness of a biological response immunomodulator, we used AM3 (glycophosphopeptide ), a glucomannan polysaccharide extracted from the cell wall of a strain of Candida utilis, in 20 children with asthmatic bronchitis. They received 2 envelopes (1 g) daily for 4 months. The results were compared with a control group of 20 untreated children with the same pathology. The following clinical and immunological parameters were assessed in all of them: cough, dyspnea, expectoration, frequency and intensity of the bronchospasm, time of administration of the symptomatic medication, and the delayed cutaneous cells response by means of the intradermal reaction of 5 antigens (Trichophyton, Candida albicans, tuberculin, E. coli and bacterial antigens). In the treated group, the immunoferon (AM3) reduced the symptoms, the intensity and frequency of the bronchospasm, and the symptomatic medication (table I, II and III). In basal conditions, the 40 children presented a state of 75% anergy; after 4 months of treatment, the treated group experienced a 45% decrease in their anergic situation, variation which was statistically significant when compared with the control group. In our 20 treated patients, AM3 behaved like and immunostimulant, improving the clinical situation and progress in patients with infectious respiratory disorders. We consider that the immunoferon constitutes a coadjuvant therapy to bacterial immunotherapy. [Immunologic clinical evaluation of a biological response modifier, AM3,

in the treatment of childhood infectious respiratory pathology].

Valoracion clinica inmunologica de un modificador de la respuesta biologica, AM3, en el tratamiento de la patologia respiratoria infecciosa. In our 20 treated patients, AM3 behaved like and immunostimulant, improving the clinical situation and progress in patients with infectious respiratory disorders. We consider that the immunoferon constitutes a coadjuvant therapy to bacterial immunotherapy. Check Tags: Human Antibiotics: TU, therapeutic use Antitussive Agents: TU, therapeutic use Asthma: CO, complications Asthma: TH, therapy \*Biological Response Modifiers: TU, therapeutic use Bronchial Spasm: CO, complications Bronchial Spasm: TH, therapy \*Calcium Phosphates: TU,. . . Therapy Disease Susceptibility Double-Blind Method English Abstract Expectorants: TU, therapeutic use \*Glycopeptides: TU, therapeutic use Immunity, Cellular ----Intradermal Tests Recurrence Respiratory Hypersensitivity: CO, complications Respiratory Hypersensitivity: DT, drug therapy \*Respiratory Hypersensitivity: TH, therapy Respiratory Tract Infections: CO, complications Respiratory Tract Infections: DT, drug therapy \*Respiratory Tract Infections: TH, therapy 87139-86-4 (Immunoferon) ANSWER 5 OF 7 MEDLINE ACCESSION NUMBER: 91363626 MEDLINE DOCUMENT NUMBER: 91363626 PubMed ID: 2491481 [The clinical evaluation of glycophosphopeptical TITLE: (Immunoferon) as combined treatment in patients with chronic lung disease]. Valoracion clinica de glicofosfopeptical (Inmunoferon) como tratamiento asociado en pacientes afectos de enfermedad pulmonar cronica. Marcos Sanchez F; Rodriguez Gallego C; Celdran Gil J; Duran AUTHOR: Perez-Navarro A ANALES DE MEDICINA INTERNA, (1989 Dec) 6 (12) 657-8. SOURCE: Journal code: 9112183. ISSN: 0212-7199. PUB. COUNTRY: Spain DOCUMENT TYPE: Letter LANGUAGE: Spanish FILE SEGMENT: Priority Journals ENTRY MONTH: 199110 ENTRY DATE: Entered STN: 19911103 Last Updated on STN: 19960129 Entered Medline: 19911016 (The clinical evaluation of glycophosphopeptical (Immunoferon) as combined treatment in patients with chronic lung disease]. Valoracion clinica de glicofosfopeptical (Inmunoferon) como tratamiento asociado en pacientes afectos de enfermedad pulmonar cronica. . Check Tags: Female; Human; Male Aged

AΒ

CT

RN

ΤI

CT

\*Glycopeptides: TU, therapeutic use \*Lung Diseases, Obstructive: DT, drug therapy

\*Calcium Phosphates: TU, therapeutic use

Drug Evaluation

Drug Therapy, Combination

Middle Age

87139-86-4 (Immunoferon) RN

ANSWER 6 OF 7 USPATFULL

ACCESSION NUMBER:

2002:119853 USPATFULL TITLE:

Asthma/allergy therapy that targets T-lymphocytes and/or eosinophils

INVENTOR(S): Nassief, Nida Abdul-Ghani, Doha, IRAQ

NUMBER KIND DATE PATENT INFORMATION: US 2002061841 A1 20020523 APPLICATION INFO.: US 2001-944564 A1 20010904 (9)

NUMBER DATE

PRIORITY INFORMATION: GB 1999-4777 19990302

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: AL-JASSIM, Rawaa, 2578 River Woods Drive, Naperville,

IL, 60565

NUMBER OF CLAIMS: 24

1 EXEMPLARY CLAIM: LINE COUNT: 772

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A pharmaceutical composition for the treatment and/or prophylaxis of diseases caused by type I hypersensitivity reactions consisting essentially of Glicophosphopeptical, or pure Nigella Sativa seeds, in a concentration which stimulate Th1 lymphocytes and selectively switch-off the eosinophilic airway inflammation

A method of treatment of allergy using Th1 stimulating agents, to be administered to a mammal such as human in need of such treatment in a shot of 5 days only, resulted in significant decrease in symptom score started day 3, and in sputum eosinophils by day 14, followed by long-term clinical remission of a mean of 6 months.

The BCG-like Th1 stimulation is also used in treating diseases in which the body defensive mechanism is a Cell Mediated Immunity, including viral infections, as but not limited to influenza and common cold, Chronic and recurrent urinary tract infection, pelvic inflammatory diseases as neuroimmune appendicitis, cancer, crohns disease and facial palsy.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Asthma/allergy therapy that targets T-lymphocytes ΤI and/or eosinophils

A method of treatment of allergy using Th1 stimulating agents, AB to be administered to a mammal such as human in need of such treatment

. . . generally directed to the fields of medicine and pharmacology, SUMM and specifically directed to a pharmaceutical composition for the treatment of asthma/allergy, consisting essentially of Glycosphosphopeptical, or as an equivalent pure Nigella sativa seeds, which is active to stimulate T-helper lymphocytes type 1 therefor selectively switching-off the eosinophilic inflammation, also treating viral respiratory tract infections (flue & influenza), other viral infection, urinary tract infection, pelvic inflammatory diseases in particular neuroimmune appendicitis, cancer, crohns. . .

[0003] Asthma is the epidemic of the new millennium. Despite SUMM the increase in our knowledge, the morbidity, mortality and prevalence of asthma and other allergic diseases are increasing as shown by WHO statistics. (1)

SUMM [0004] Barnes J December 1999, review the current state of anti-

```
asthma therapy, over the past 10 years there have been striking
improvement in the treatment of asthma largely as a result of
the earlier and more widespread use of inhaled corticosteroids. The
developments of new treatments for asthma has proved
difficult, although several immunologic approaches are undergoing
preclinical and clinical assessment. Antileukotrienes are the only new
class of drugs to treat asthma that have been introduced in
the past 25 years, but their efficacy is somewhat limited and
unpredictable, as compared with.
. . . was not associated with large reductions in markers of
eosinophilic inflammation, bronchovascular permiability, or mucus
hypersecretion. Alternative therapies for corticoseroid-dependant
asthma, such as methotrexate, cyclosporine and oral gold, are
problematic and have high incidence of adverse effect. (2)
. . . accordingly an outstanding need for an effective and convenient
means for treating and/or preventing type I IgE-mediated
hypersensitivity reactions, including asthma, in mammals.
[0008] Glycophosphopeptical: The present inventor has, surprisingly,
found that a short-term administration of Glycophosphopeptical
(Glicofosfopeptical) to patients suffering from asthma is
capable of treating and/or preventing asthma,
Glycophosopeptical is marketed under the trade names "IMMUNOFERON" and
"INMUNOFERON" drug by Industrial Farmaceutica Cantabria, S.A. (Spain),
Glycophosopeptical is a. . . and stimulating cell mediated immunity.
It is not indicated for the treatment of diseases caused by type I
hypersensitivity and asthma defined
. . . widely available for use as a spice or condiment. Nigella
sativa is folk medicines, treating many diseases including many with
respiratory symptoms.
[0019] The following studies are considered relevant to the relation
between N. sativa and asthma Sayed 1980: The oil is used in
the treatment of asthma, respiratory oppression and
coughs. The active principal, nigellone, has been isolated from the
volatile oil fraction and is reported to be useful in the treatment of
bronchial asthma. (9)
[0021] El-Tahir et al 1993: The respiratory effect of the
volatile oil of the black seed (Nigella sativa) in guinea-pig:
elucidation of the mechanism (s) of action.. .
. . . immunity to tuberculosis by stimulating Cell Mediated Immunity
mediated by T lymphocytes (Th1 ). The relation of BCG vaccination to
asthma is a debate. BCG has also been used as a therapeutic
agent in the treatment of cancer, inducing Cell Mediated.
[0029] Currently, IgE production is under the control of Interleukiens
produced by T-helper 2 lymphocyte, allergy is clearly a Th2
disease.
[0031] Asthma is an inflammatory mediator soup. (21)
[0033] 5- My novel concept in immunopathology of allergy
[0034] A normal person is in a state of "Tolerance to Environmental
Antigen, TEA". Pre-inflammatory phase of allergy is controlled
by Th1 cells, and it's cytokine interferon. This is based on my
discovery that interferon is a potent.
[0035] TH1 suppression is the cause of allergy. Manifested by
low serum interferon in acute asthmatic attacks. (26, 27)
. . . of selectively switch-off the eosinophilic airway inflammation,
normalizing serum interferon This can be achieved by using a novel class
of asthma therapy, which is the subject of this invention.
"days" therapy with a BCG-like Th1 stimulation .fwdarw. long term
clinical remission
[0037] The present invention is introducing a new class of anti-
allergy/anti-asthma therapy that target the
pre-inflammatory phase of the allergic reaction being defined by the
present inventor as "Th1 lymphocytes" and. .
[0038] This present invention provides a pharmaceutical composition and
```

treatment of asthma/allergy, consisting essentially

SUMM

```
of Glycophosphopeptical, or an equivalent pure Nigella sativa seeds,
       which is active to stimulate T-helper lymphocytes type I.
       [0039] The present inventor has, surprisingly, provided a method of
SUMM
       treatment for patients suffering from asthma/allergy
       , administering Glycophosphopeptical to a mammal such as human in need
       of such treatment a shot of 5 days only, to.
       . . . for the treatment and/or prophylaxis of diseases caused by type
SUMM
       I IgE-mediated hypersensitivity reaction, such as extrinsic, intrinsic
       or mixed asthma, allergic and perennial rhinitis, allergic
       conjunctivitis, chronic urticaria, atopic dermatitis, and/or laryngeal
       oedema, to be administered to a mammal such.
       [0046] The use of Th1 stimulating agents in the treatment of
SUMM
       allergy/asthma is dependent on the fact that
       interferon is an in vivo Eosinophilic Chemotactic Factor, and that serum
       interferon and Th1.
SUMM
       [0047] The method of treating a chronic asthma and
       allergy using 5 days schedule is based on that the recommended
       dose of Th1 lymphocytes stimulating agent is sufficient to selectively.
                for the treatment and/or prophylaxis of diseases characterized
SUMM
       by a body immune defensive mechanism is Cell Mediated Immunity as viral
       respiratory tract infections such as, but not limited to
       influenza and common cold, other viral infections.
       [0050] Additionally the present invention provide a method of treatment
SUMM
       of viral respiratory tract infections such as, but not limited
       to influenza and common cold, other viral infections comprising the
       administration to a. .
SUMM
         . . 1-20 days, preferably 5 days for type 1 hypersensitivity
       reaction, of particular interest but not limited to the chronic
       corticosteroid-dependent allergy and asthma. It
       provides a steroid saving activity.
SUMM
       [0057] Manufacturing a pharmaceutical preparation to provide a therapy
       for mammals including humans for the treatment of asthma and
       allergy, also a Th1 stimulating and Cell Mediated Immunity
       stimulating remedy for viral diseases urinary tract infection, pelvic
       inflammatory disease, crohns.
DETD
       . . . invention was conceived during October 1993, after an
       experiment of nature that happened to the inventor. Being sever
       asthmatic her {\tt asthma} was relived after certain health
       incident. As an immunologist she linked the incident with interferon.
       This is considered as Stage. . . Chemotactic Factor. Stage III: A
       marketed drug immunoferon (glycophosphopeptical), indicated for diseases
       unrelated to type 1 hypersensitivity, was linked with allergy
       in a novel way (depending on the above observation), using it in a
       non-routine indication and dosage.
DETD
       . . . its utility and reduction to practice, a double-blind placebo
       controlled clinical trial was designed. 120 subjects with different
       types of allergy were chosen and divided into two groups,
      matched for age, sex, and severity of the allergic condition after an
DETD
       [0060] 1 - Diseases involved include seasonal allergic rhinitis,
       allergic conjunctivitis, chronic urticaria, asthma, and
       laryngeal edema.
DETD
       . . treatment, the total dose received and the schedule of therapy
      were verified to find the best method of treating various
      allergies. Glycophosphopeptical was given in addition to the
      conventional therapy. The full course of 15 g total dose, was divided
DETD
       [0076] Asthma: dyspnoea, wheeze, and cough.
DETD
         . . by day 3, reaching maximum in day 7. Such symptomatic
       improvement is totally unexpected particularly in patients with allergic
      rhinitis, asthma and laryngeal edema.
DETD
       . . . stop all other forms of therapy, including steroids. Hence the
```

present invention is useful as a treatment and/or prevention of

allergy and asthma.

DETD [0080] Side effects: few are mentioned in the manufacturer's leaflet, glycophosphopeptical is not contraindicated for **asthma** or **allergy**, no other side effects were noticed during this short course of therapy.

DETD [0081] Stage IV: Nine patients age range 36-72 with chronic severe asthma of a duration ranging between 1-32 years, all of whom were on a maximal dose of broncodilators (as recommended by. . .

DETD [0094] Hypersecretion of heavy mucus or sputum, resulting in mucus-related symptoms, is characteristic of **asthma**. The eosinophil levels in the sputum are generally found to correlate with the severity of the disease. The sputum produced. . .

DETD [0115] Need for traditional forms of asthma therapy

DETD . . . mild, being manifested only in some shortness of breath, with mild coughing and small amounts of sputum. Traditional forms of asthma therapy were required only when the subjects were suffering from colds. At least eight out of the ten subjects were. .

DETD [0119] Conclusion: Glycophosphopeptical is an agent that can be used in treating asthma of all types and severity, allergic/ perennial rhinitis, and other allergies. This short-term therapy produce Long-term effect

DETD . . . love-in-the-mist) is an equivalent to-glycophosphopeptical. The use of the pure seeds of Nigella sativa for the preparation of an asthma and allergy agent in a concentration which was found to perform substantially the same function in substantially the same way to obtain. . .

CLM What is claimed is:

- 1. Use of glycophosphopeptical for the treatment and/or prophylaxis of allergy/asthma for administration to a mammal such as a human in need of such treatment.
- 2. Use of glycophosphopeptical for the preparation of an asthma /allergy drug 7 such as extrinsic, intrinsic or mixed asthma, allergic and perennial rhinitis, allergic conjunctivitis, chronic urticaria, atopic dermatitis, and/or laryngeal oedema, to be administered to a mammal such. . .
  7. The use of the pure seeds of Nigella sativa for the preparation of an asthma and allergy agent in a concentration which was found to perform substantially the same function in substantially the same way to obtain. . .
  14. The manufacture of a diagnostic kit to diagnose allergy

and asthma and to asses the severity Of the disease, using of a quantitative serum interferon concentration measurement.

. for the treatment and/or prophylaxis of diseases characterized by a body immune defensive mechanism is Cell Mediated Immunity as viral respiratory tract infections such as, but not limited to influenza and common cold, other viral infections.

18. A method of treatment of viral respiratory tract infections such as, but not limited to influenza and common cold, other viral infections comprising the administration to a. . .

IT 87139-86-4, Inmunoferon

(glycophosphopeptical or Nigella sativa seeds for asthma/allergy therapy targeting t-lymphocytes and/or eosinophils)

L3 ANSWER 7 OF 7 TOXCENTER COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:188822 TOXCENTER

COPYRIGHT: Copyright 2003 ACS DOCUMENT NUMBER: CA13315202992A

TITLE: Glycophosphopeptical or Nigella sativa seeds for

asthma/allergy therapy that targets
T-lymphocytes and/or eosinophils

AUTHOR(S): Nassief, Nida Abdul-Ghani

CORPORATE SOURCE: ASSIGNEE: James, David

WO 2000051580 A2 8 Sep 2000 PATENT INFORMATION: (2000) PCT Int. Appl., 28 pp. SOURCE:

CODEN: PIXXD2.

COUNTRY:

AUSTRALIA

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CAPLUS 2000:627968

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A pharmaceutical compn. for the treatment and/or prophylaxis of diseases AB caused by type I hypersensitivity reactions consisting essentially of glycophosphopeptical, or pure Nigella Sativa seeds, in a concn. which stimulate Th1 lymphocytes and selectively switch-off the eosinophilic airway inflammation. A method of treatment of allergy using Th1 stimulating agents, to be administered to a mammal such as human in need of such treatment in a shot of 5 days only, resulted in significant decrease in symptom score started day 3, and in sputum eosinophils by day 14, followed by long-term clin. remission of a mean of 6 mo. The BCG-like Th1 stimulation is also used in treating diseases in which the body defensive mechanism is a cell-mediated immunity, including viral infections, including influenza and common cold, chronic and recurrent urinary tract infection, pelvic inflammatory diseases as neuroimmune appendicitis, cancer, Crohn's disease and facial palsy.

Glycophosphopeptical or Nigella sativa seeds for asthma/ ΤI allergy therapy that targets T-lymphocytes and/or eosinophils

. . seeds, in a concn. which stimulate Th1 lymphocytes and selectively AB. switch-off the eosinophilic airway inflammation. A method of treatment of allergy using Th1 stimulating agents, to be administered to a mammal such as human in need of such treatment in a.

ST Miscellaneous Descriptors

> glycophosphopeptical immunostimulant cell mediated immunity; allergy T cell eosinophil glycophosphopeptical immunostimulant; asthma T cell eosinophil glycophosphopeptical immunostimulant

**87139-86-4** (Inmunoferon) RN

Title:

The clinical evaluation of glycophosphopeptical (Immunoferon) as combined treatment in patients

with chronic lung disease]

Transliterated Title: Valoración clínica de glicofosfopeptical (Inmunoferon) como tratamiento asociado en pacientes

afectos de enfermedad pulmonar crónica.

Author(s):

Marcos Sánchez F; Rodríguez Gallego C; Celdrán Gil J; Durán Pérez-Navarro A

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MeSH Terms:

Calcium Phosphates/\*therapeutic use

Glycopeptides/\*therapeutic use

Lung Diseases, Obstructive/\*drug therapy

Aged; Drug Evaluation; Drug Therapy, Combination; Female; Human; Male; Middle Age

CAS Registry No.:-

=0-(Calcium Phosphates) \_

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acuerdo a la clasificación de Ann Arbor corresponde a un estadío IV

Los criterios de Dawson et al. para definir los LNH de origen gastrointestinal son: 1) ausencia de adenopatías periféricas y mediastínicas; 2) normalidad en el recuento hematimétrico (no infiltración de médula ósea); 3) predominio de lesiones digestivas con afectación sólo de ganglios regionales; 4) no infiltración de hígado ni bazo (2). Según éstos sólo puede considerarse LNH de origen gastrointestinal los estadíos IE y IIE de Ann Arbor. Esta definición restrictiva no se sigue actualmente por la mayoría de los autores, que prefieren los criterios de Lewin et al, según los cuales un LNH se considera de origen gastrointestinal cuando al diagnóstico hay predominio de lesiones linfomatosas en tubo digestivo y/o predominio de manifestaciones clínicas digestivas provocadas por la localización gastrointestinal del LNH (4). Esta opción, más clínica y práctica, permite incluir como LNH gastrointestinal los estadíos IIIE y IV de Ann Arbor. Consideramos, por tanto, que es de acuerdo a los criterios de Lewin et al, y no a los de Dawson et al, como puede considerarse el presente LNH como de origen gástrico.

La frecuente asociación de L.NH gástrico y del anillo de Waldeyer aconsejan la exploración de esta región (5).

Respecto de la revisión de la literatura, 11 casos de LNH y adenocarcinoma gástricos simultáneos o sincrónicos, remitimos a los autores un caso más (inmunocitoma y adenocarcinoma gástricos) referido por Planker et al que recogen 32 casos de la literatura (6).

Las referencias sobre la asociación sincrónica y metacrónica de adenocarcinoma gástrico y LNH son escasas. Moertel y Hagedorn revisaron 120 casos de leucemia y LNH ganglionar asociados simultáneamente a una neoplasia sólida y en sólo 3 ocasiones ésta correspondió a un adenocarcinoma gástrico (7). También es poco frecuente la aparición de un adenocarcinoma de estómago en el curso de un LNH ganglionar; McDougall et al. observaron en 630 casos de LNH con un seguimiento mediano de más de 3 años la aparición de 4 adenocarcinomas gástricos, y concluyen, como la mayoría de los autores, que la presencia de un LNH no predispone a la aparición de una segunda neoplasia (8). Por último, la aparición de un adenocarcinoma de estómago años después del diagnóstico y tratamiento de un LNH gástrico sólo se ha descrito en 17 ocasiones (9).

A pesar de que se han involucrado factores tales como la inmunodepresión tumoral y la carcinogénesis del tratamiento oncológico en la explicación de las diversas variedades de esta asociación, estamos de acuerdo con los autores en que no existen fundamentos patogénicos claros ni epidemiológicos suficientes para entender esta combinación excepcional, salvo el puro capricho de la naturaleza que asocia una neoplasia prevalente, adenocarcinoma gástrico, con un LNH.

# C. GARCIA GIRON, R. DIAZ OTAZU \*, M. ALDAMIZ \*\*, J. FELIU \*\*\*

Oncología Médica. \* Anatomía Patológica. \*\* Medicina Interna. Hospital Txagorritxu. Vitoria. \*\*\* Oncología Médica. Hospital La Paz, Madrid.

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- foma no hodgkiniano de amígdala. A propósito de 8 casos. Med Clin (Barc) 1987; 89: 525.
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  J, Burgos F. Primary gastric malignant lymphoma followed by gastric
  adenocarcinoma. A case report and review of the literature. Am J Clin
  Oncol (en prensa).

Valoración clínica de glicofosfopeptical (Inmunoferon R) como tratamiento asociado en pacientes afectos de enfermedad pulmonar crónica

Sr. Director: = = = -

El glicofosfopeptical (Inmunoferon<sup>R</sup>), también conocido por AM3 es un polisacárido glucomano extraído mediante procesos fermentativos de la pared celular de una cepa de *Candida utilis* y absorbido en una matriz inorgánica de fosfato y sulfato cálcico. Es farmacológicamente definido como un modificador de la respuesta biológica (BRM), con características de inmunomodulación sobre el comportamiento de macrófagos (1), polimorfonucleares y células NK.

Diversos estudios han demostrado una disminución del número de recidivas por patología infecciosa en pacientes afectos de procesos crónicos pulmonares y de la esfera O.R.L. (2,3,4,5).

En base a estos datos decidimos utilizar el fármaco en un grupo de 16 pacientes (hasta este momento), 12 hombres (75%) y 4 mujeres. Las edades estaban comprendidas entre 55 y 78 años con una edad media de 68. Todos estaban diagnosticados de enfermedad pulmonar obstructiva crónica, 4 tenian bronquiectasias bilaterales y otros 4 lesiones residuales a tuberculosis pulmonar. Todos los enfermos se caracterizaban por frecuentes agudizaciones tras procesos presuntamente infecciosos, lo que motivaba múltiples consultas y reiterados ingresos.

Se procedió a la administración de 3 cápsulas al día de glicofosfopetical (Inmunoferon<sup>R</sup>) como tratamiento asociado al que previamente llevaban (broncodilatadores, etc.). Se efectuaron controles clínicos mensuales y en el caso de presentar agudizaciones. Se valoraron parámetros clínicos (incremento de tos y de disnea, expectoración purulenta, fiebre). Las crisis se valoraban como (1: leve. 2: moderada. 3: grave o severa y 4: muy severa). Asimismo se solicitó al enfermo su opinión sobre la eficacia del fármaco (nula, moderadamente buena, buena y muy buena). A los 3 meses de iniciado el tratamiento el número de crisis mensuales había disminuido a 1 (previamente 1,5), el consumo de antibióticos y corticoides había disminuido en este colectivo. 4 enfermos (25%) valoraron los resultados del fármaco como muy buenos, 2 (12,5%) de buenos, 3 (18,75%) de moderadamente buenos y 7 (43,75%) de nulos. Pese a tratarse de una serie muy pequeña y al no existir un grupo control los resultados son difícilmente valorables, pero parecen mostrar un efecto moderadamente beneficioso del glicofosfopeptical (Inmunoferon R) como tratamiento asociado en pacientes afectos de enfermedades crónicas pulmonares caracterizados por presentar múltiples agudizaciones por presuntos procesos infecciosos.

#### F. MARCOS SANCHEZ, C. RODRIGUEZ GALLEGO, J. CELDRAN GIL, A. DÜRAN PEREZ-NAVARRO

Servicio de Medicina Interna del Hospital del Insalud de Talavera de la Reina (Toledo).

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## Hiponatremia e hipertensión arterial

Sr. Director:

El Dr. Hergueta García de Guadiana G. et al. ha presentado recientemente en su revista un interesante artículo referente a la utilidad del verapamil versus clortalidona en el tratamiento de pacientes afectos de hipertensión leve-moderada (1).

En el apartado de resultados nos-llama la atención el nivel extraordinariamente bajo de las cifras de sodio plasmático con valores entre 116 y 123 mEq/l (tabla II de dicho estudio), sin embargo el potasio plasmático se encuentra-en límites normales. Si dichas cifras de natremia no son un error de transcripción (lo más probable en nuestra opinión), contraindicaría un tratamiento con diuréticos e incluso exigiría un estudio detenido de su etiología previamente a cualquier tratamiento que pudiera modificar el volumen extracelular.

Creemos que al tratarse de un estudio que presenta gran interés tanto en el medio intrahospitalario como extrahospitalario, aclarar este aspecto puede ser interesante.

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 Hergueta García de Guadiana G, Paumard Fraguas A. Efectos de un antagonista del calcio, verapamil, sobre la hipertensión arterial esencial leve-moderada. An Med Intern (Madrid) 1989; 6: 15-18.

## Intoxicación por talio: Problema actual

Sr. Director:

Las sales de talio, usadas hasta su prohibición doméstica, como agente depilatorio y eficaz raticida (1) provocan tras su ingestión accidental o premeditada una severa intoxicación, que si bien compromete preferentemente el sistema nervioso, induce un fallo multiorgánico precipitando en muchos casos la muerte del enfermo (2).

Presentamos la descripción de un caso de intoxicación aguda por talio estudiado en nuestro centro, cuya relevancia, independiente del interés clínico que supone el análisis de un proceso infrecuente, estriba en la constatación de la presencia de agentes en el mercado que puedan contener dicho elemento, y que en el caso de nuestra paciente no pudo ser identificado.

La enferma de 30 años de edad, consultó en nuestro servicio por una clínica de 2 semanas de evolución consistente en: parestesias dolorosas en ambas plantas con carácter ascendente hasta raíz de miembros inferiores y discreto déficit motor, dolor abdominal difuso, vómitos, estreñimiento pertinaz, trastornos del comportamiento con estado de agitación, y alopecia progresiva iniciada una semana tras el comienzo de los síntomas.

Al ingreso la enferma presentaba taquicardia sinusal a 130 lpm destacando en la exploración clínica: alopecia generalizada, ritmo cardiaco de galope, dolor a la presión en epi y mesogastrio con abdomen blando, depilación en miembros y axilas, discreta disminución de la fuerza distal en piernas, hipotreflexia aquílea y ro-

tuliana, hiperestesia en tercio distal de ambos miembros inferiores, área de hipoestesia en cara externa de muslos, e importante estado de agitación.

Los exámenes biológicos realizados fueron normales a excepción de sedimento urinario con 150 hematíes y 20 leucocitos por campo.

El E.C.G. de ingreso presentó taquicardia sinusal a 130 lpm con ondas T invertidas en las derivaciones DII, DIII, a VF y todas las precordiales. Los E.E.G. y electromiograma realizados fueron informados respectivamente como: polineuropatía de predominio sensitivo tipo desmielinizante más intensa en miembros inferiores el primero, y presencia de ondas lentas sugerentes de afectación cerebeal difusa de grado medio el segundo. En base a los datos previamente referidos y ante la sospecha de intoxicación por metales pesados, se realizaron determinaciones para plomo, arsénico, y talio, resultando patológica esta última con un nivel en orina 120 µgr/100 cm³. Una vez confirmada la intoxicación por talio se procedió a nuevo interrogatorio minucioso para conocer el producto causante de la misma, sin obtener la información deseada.

En el momento actual, I año tras el episodio tóxico, y mediando sólo tratamiento sintomático, la enferma se encuentra sana y sin vestigios de enfermedad.

Históricamente las sales de talio han tenido aplicaciones industriales, santiarias, domésticas, y de uso cosmético, si bien, sólo se han descrito intoxicaciones severas en los tres últimos casos (3).

La dosis letal media es aproximadamente de 1 gr en adulto, ejerciendo su acción tóxica a través de un trastorno mitocondrial, probablemente favorecido por el comportamiento mimético con ión potasio, con el que compite en el sistema de transporte de membrama (4). Su absorción dérmica y gastrointestinal es rápida con un proceso cíclio de reabsorción-secreción en el último caso. Nosotros no pudimos constatar el producto ni la vía de administración en la enferma, aunque esta había utilizado 15 días antes una crema de aplicación dérmica, cuya composición artesanal y finalidad de uso se nos ocultó.

El comienzo de los síntomas suele ser insidioso, alcanzando un máximo en la segunda o tercera semana, como se puede apreciar en nuestra paciente, para alcanzar posteriormente una declinación o la muerte en los casos graves.

La observación clínica descrita recoge prácticamente el conjunto sintomático de todos los órganos afectados habitualmente, con compromiso de los tegumentos, trastornos neurológicos centrales manifestados por anomalías en el comportamiento, neuropatía periférica de predominio sensitivo, trastornos en el ritmo cardíaco con signos de isquemia miocárdica, nefropatía por presunta lesión de epitelio tubular, y disfunción gastrointestinal con náuscas, vómitos, estreñimiento pertinaz y dolor abdominal.

La dosificación de talio en orina no fue conocida, por problemas técnicos, hasta el decimosegundo día de ingreso, cuando la enferma había iniciado una clara mejoría, siendo éste el motivo de no aplicar tratamiento específico (5,6,7,8). Pese a que el talio puede ser medido en sangre 12 h tras la ingestión de 1 gr, encontrando niveles próximos a los 30  $\mu$ gr/100 cm³, es procedimiento habitual realizar la determinación en orina, ya que permanece detectable hasta 3 meses tras la intoxicación, siendo útil para diagnósticos retrospectivos precoces como en el caso de nuestra paciente (2).

El tratamiento, iniciado con lavado gástrico de soluciones que contengan yoduro sódico para hacer no absorbible la sal de talio, está fundamentado en el empleo de Berliner-Blue (ferriexacianato) como neutralizante del ciclo intestinal, hemodiálisis, diuresis forzada y hemoperfusión (5,6,7). Como conclusión consideramos que, pese a su infrecuencia, todo enfermo portador de una neuropatía periférica de predominio sensitivo de causa desconocida, debe ser sometido a estudios que incluyan determinación de talio en sangre y orina, con el fin de iniciar tratamiento precoz que evite la muerte del paciente.

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